### **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)**

February 2005

Exhibit R-2

BUDGET ACTIVITY

#### **5 - System Development and Demonstration**

PE NUMBER AND TITLE 0604 □2 □A - Soldier Systems - Warrior Dem/Val

COST (In Thousands)		FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
	Total Program Element (PE) Cost	0	0	57818	27086	29935	29927	41877	46842	0	233485
S56	MOUNTED WARRIOR	0	0	7600	0	0	0	0	0	0	7600
S57	LAND WARRIOR	0	0	50218	27086	29935	29927	41877	46842	0	225885

#### A. Mission Description and Budget Item Justification: Not applicable for this item.

B. Program Change Summary	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2005)	0	0	0
Current Budget (FY 2006/2007 PB)	0	57818	27086
Total Adjustments	0	57818	27086

#### **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)** February 2005 **BUDGET ACTIVITY** PE NUMBER AND TITLE **PROJECT** 0604 □ 2 □ A - Soldier Systems - Warrior Dem/Val 5 - System Development and Demonstration **S56** FY 2004 FY 2005 FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 Total Cost Cost to COST (In Thousands) Estimate Estimate Estimate Estimate Estimate Estimate Complete Actual Estimate 0 0 0 S56 MOUNTED WARRIOR 7600 0 0 0 7600

A. Mission Description and Budget Item Justification: The Army has moved funds from PE 0604713A-680 effective FY06. Mounted Warrior (MW) provides combat crewmembers and vehicle commanders in the Current and Future force with increased mission effectiveness on the network centric battlefield in the areas of lethality, command and control, communications, survivability, mobility, and sustainability. MW Soldier Systems (MWSS) will provide the combat commander increased capabilities to conduct offensive and defensive operations by providing uninterrupted viewing of their immediate surroundings while remaining connected to on-board platform C41 capabilities, thereby providing crews with continuous situational awareness. MWSS Helmet Mounted Display extends fire control information to vehicle commanders while they are standing up in the hatch, or dismounted allowing them to maintain immediate situational awareness of their direct battle space, while simultaneously controlling inter-netted fires, vehicle, or dismounted soldiers. MWSS will provide remote digital connectivity to the Force XXI Battle command Brigade and Below (FBCB2) information system via the vehicles C4I capabilities. The MWSS will maximize crew mobility, providing hands free, tetherless communications.

Prior to FY06 this funding was under PE 0604713A, Project 680.

Accomplishments/Planned Program  FY2006 Planned Program: Continue developmental engineering, prototype manufacturing and systems engineering and program management support for Battalion quantity of Mounted Warrior.	FY 2004 0	FY 2005 0	FY 2006 7600	FY 2007 0	
Totals	0	0	7600	0	

0604827A (S56) MOUNTED WARRIOR Exhibit R-2A Budget Item Justification

#### **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)**

February 2005

**BUDGET ACTIVITY 5 - System Development and Demonstration** 

PE NUMBER AND TITLE

PROJECT **S56** 

0604 □ 2 □ A - Soldier Systems - Warrior Dem/Val

B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
RDTE, 0604713A, D680, Mounted Warrior	0	2685	0	0	0	0	0	0	0	2685
OPA 3, M80600, Mounted Warrior	0	0	1600	0	0	0	0	0	0	1600
RDTE, 0604713A, D667, Land Warrior	78183	72974	0	0	0	0	0	0	0	151157
RDTE, 0604827A, S57, Land Warrior	0	0	50218	27086	29935	29927	41877	46842	Continuing	Continuing
RDTE, 0303001, DJ50, Future Warrior	43806	49143	56034	40286	44956	44998	42526	43976	Continuing	Continuing
Technology									_	_
OPA 4, MS3610, Land Warrior Initial Spares	643	708	492	1574	1622	1613	629	632	Continuing	Continuing
OPA 3, M80500, Land Warrior	1538	8862	35700	21198	49066	70884	28680	3087	Continuing	Continuing

<u>C. Acquisition Strategy:</u> The Army has moved funds from PE 0604713A-680 effective FY06. The MW program provides the spiral fielding of mature technologies and advanced capabilities to meet the needs of the Combat Vehicle Crewman (CVC). The first spiral will equip a Stryker battalion with mature/existing technologies to be used to develop tactics, techniques and procedures (TTPs), which will be used to define the requirements for future spirals.

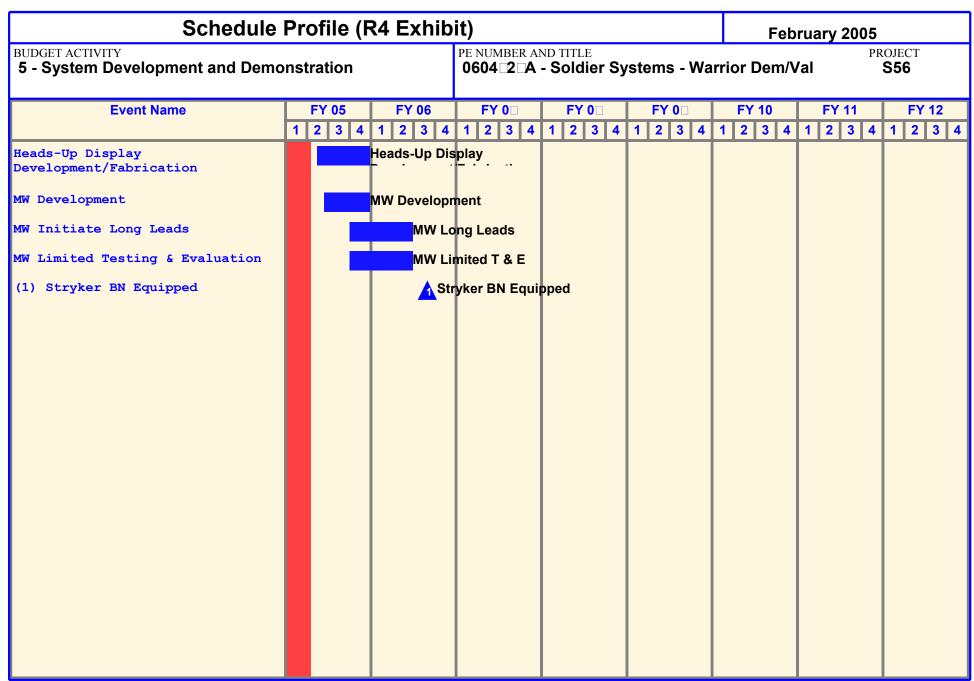
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	ARM'	Y RDT&E CO	SIAN	ALYS	IS(R3)				Feb	ruary 20	05	
BUDGET ACTIVITY 5 - System Develo	pment and	Demonstration			iumber an <b>04</b>	D TITLE <b>Soldier</b> S	Systems	- Warrio	or Dem/\	/al	PROJEC <b>S56</b>	
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Targe Value o Contrac
a . Develop Mounted Warrior technologies	TBD	TBD	0	0		5852	2Q	0		0	5852	0
Subtotal:			0	0		5852		0		0	5852	0
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Targe Value o Contrac
a . PM Mounted Warrior Program Support	OGA, MIPR	Various	0	0		600	1-4Q	0		0	600	(

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	ARM'	Y RDT&E CO	ST AN	<b>ALYS</b>	IS(R3)				Feb	ruary 200	05		
BUDGET ACTIVITY 5 - System Develor	oment and	Demonstration		PE N <b>06</b> 0	UMBER AN: 04 2 A -	D TITLE <b>Soldier (</b>	Systems	- Warric				PROJECT <b>S56</b>	
II. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Complete	Total Cost	Targe Value o Contrac	
Subtotal:			0	0		0		0		0	0	(	
V. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Complete	Total Cost	Targe Value o Contrac	
a.PM Soldier Warrior oversight of MW program	In- House/Task Order	PM Soldier Warrior, Ft. Belvoir, VA	0	0		1148	1-4Q	0		0	1148		
Subtotal:			0	0		1148		0		0	1148	(	
Project Total Cost:			0	0		7600		0		0	7600	(	

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Exhibit R-4 Budget Item Justification

Schedule Detail (	(R4a Exhib	it)				February 2005			
BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBI <b>0604</b> □ <b>2</b>	r Dem/Val PROJE						
Schedule Detail_	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
Heads-up Display Development/Fabrication		2-4Q							
MW Development		2-4Q							
MW Initiate Long Leads		3-4Q	1-2Q						
		0.40	1-2Q						
MW Limited T & E		3-4Q	1-2Q						

Exhibit R-4a Budget Item Justification

ARMY RDT&E BUDGET ITE	M JUS	STIFIC	ATION	( <b>R2</b> a	Exhibi <sup>,</sup>	t)	February 2005			
BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE PROJ 0604 2 A - Soldier Systems - Warrior Dem/Val S5								
COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
S57 LAND WARRIOR	0		50218	27086	29935	29927	41877	46842	0	225885

A. Mission Description and Budget Item Justification: The Army has moved funds from PE 0604713A-667 effective FY06. In an effort to comply with Congressional intent and to leverage from the success of current developed Land Warrior (LW) components, the Army has refocused the LW program to spiral out Dismounted Battle Command System (DBCS) capabilities (e.g. Commander's Digital Assistant (CDA), Enhanced Position Location and Reporting System (EPLRS) MicroLight Radio) to Soldiers in the field for near-term capability. Accelerating components of the Land Warrior System also addresses the Soldier component of Future Combat System (FCS). Land Warrior integrated ensemble systems, to include applicable long-lead items, will be produced for a Stryker Battalion for evaluation purposes in the Fiscal Year 2006 (FY06) timeframe. The Ground Soldier System (GSS) will leverage the technological advancements transitioned from the Science and Technology (S&T) community including Future Force Warrior (FFW) to develop the Ground Soldier capability for FCS. The LW program and FFW Advanced Technology Demonstration (ATD) have made progress in the consolidating in accordance with the FY05 Appropriations Language and a report has been submitted to Congress.

Prior to FY06 this funding was under PE 0604713A, Project 667.

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
FY06: Prime contractor continues development engineering efforts for DBCS capabilities and for the LW integrated ensemble systems for the Stryker Battalion.  FY07: Funds are for the Prime contractor developing one company's worth of prototype devices for DBCS capabilities and for continuing development engineering efforts for the LW integrated ensemble systems for the Stryker Battalion. These efforts provide a segue for initial development of the Ground Soldier capability for FCS.	0	0	32284	11492
FY06: Funds will be used for Operational testing for the DBCS capability efforts and for the LW integrated ensemble systems for the Stryker Battalion.  FY07: Funds will be used to perform developmental and operational testing on the DBCS capability for Light Forces.	0	0	7215	5350

0604827A (S57) LAND WARRIOR Exhibit R-2A Budget Item Justification

#### **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)**

February 2005

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

PROJECT

0604 □ 2 □ A - Soldier Systems - Warrior Dem/Val

S5□

Accomplishments/Planned Program (continued) FY06 and FY07: Funds will be used for program manager Continue minimal operation of PM Land Warrior - Fort Mor Bragg. Program development and execution of Memorance related to DBCS and FCS capabilities. Conduct technical ASARC Milestone preparations, develop, maintain, report Support NATO Land Group 3 and other partnered countrie operations.	FY 200	14 FY 200	95 FY 2006 0 10719	FY 2007 10244								
Totals								0	0 50218	27086		
B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost		
RDTE, 0604713A, D667, Land Warrior	78183	72974	0	0	0	0	0	0	0	151157		
OPA 3, M80500, Land Warrior	1538	8862	35700	21198	49066	70884	28680	3087	Continuing	Continuing		
OPA 4, MS3610, Land Warrior Initial Spares	643	708	492	1574	1622	1613	629	632	Continuing	Continuing		
RDTE, 0603001, DJ50, Future Warrior Technology Insertion	43806	49143	56034	40286	44956	44998	42526	43976	Continuing	Continuing		
RDTE, 0604817A, D902 Combat Identification	8021	0	0	0	0	0	0	0	0	8021		
RDTE, 0604713A, Mounted Warrior												
RDTE, 0604827, S56, Mounted Warrior	OTE, 0604827, S56, Mounted Warrior 0 0 7600 0 0											
OPA 3, M80600, Mounted Warrior	0	0	1600	0	0	0	0	0	0	1600		

C. Acquisition Strategy: The Army has moved funds from PE 0604713A-667 effective FY06. Funds are under PE 0604827A-S57 after FY 2005. Efforts are refocused as LW ramps down development engineering and integration for DBCS capabilities, and ramps up development engineering for the Soldier Component of the Future Combat System (FCS) Unit of Action(UA). In an effort to comply with Congressional intent and to leverage from the success of current developed Land Warrior (LW) components, the Army has refocused the LW program to spiral out Dismounted Battle Command System (DBCS) capabilities (e.g. Commander's Digital Assistant (CDA), Enhanced Position Location and Reporting System (EPLRS) MicroLight Radio) to Soldiers in the field for near-term capability. Accelerating components of the Land Warrior System also addresses the Soldier component of Future Combat System (FCS). Land Warrior integrated ensemble systems, to include applicable long-lead items, will be produced for a Stryker Battalion for evaluation purposes in the Fiscal Year 2006 (FY06) timeframe.

0604827A (S57) LAND WARRIOR Item No. 124 Page 9 of 14Exhibit R-2A1075Budget Item Justification

# **ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)** February 2005 PE NUMBER AND TITLE BUDGET ACTIVITY PROJECT 0604 2 A - Soldier Systems - Warrior Dem/Val **5 - System Development and Demonstration S5**□ The Ground Soldier System (GSS) will leverage the technological advancements transitioned from the Science and Technology (S&T) community including Future Force Warrior (FFW) to develop the Ground Soldier capability for FCS. The LW program and FFW Advanced Technology Demonstration (ATD) have made progress in the consolidating in accordance with the FY05 Appropriations Language and a report has been submitted to Congress.

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Budget Item Justification

## ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE 0604 □2 □A - Soldier Systems - Warrior Dem/Val

PROJECT **S5**□

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost		Complete		Target Value of Contract
a . Develop DBCS capabilities, LW integrated ensemble systems, and GSS capability	CPFF	GDDS, Scottsdale, Arizona	0	0		32284	1-4Q	11492	1-4Q	Continue	43776	0
Subtotal:			0	0		32284		11492		Continue	43776	0

Remarks: Award dates covering multiple quarters reflect multiple awards.

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	 FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost		Complete		Target Value of Contract
a . Modern Tech Inc - Support Contractors	Task Order	Modern Tech Inc, Springfield, VA	0	0	2500	1-4Q	2500	1-4Q	0	5000	0
b . TSM, PM Land Warrior North Support, and others	OGA, MIPR	various	0	0	1000	1-4Q	1000	1-4Q	0	2000	0
Subtotal:			0	0	3500		3500		0	7000	0

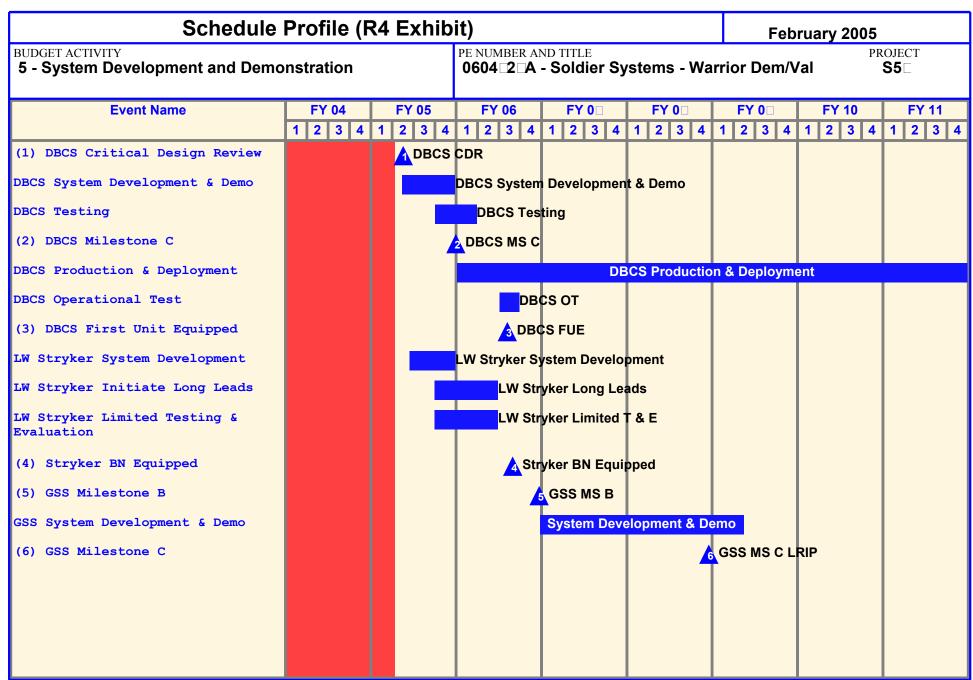
Remarks: Buys government and contract engineering and logistical support for overall program support.

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ARMY RDT&E COST ANALYSIS(R3)									February 2005				
BUDGET ACTIVITY 5 - System Development and Demonstration				PE N	PE NUMBER AND TITLE  0604 2 A - Soldier Systems - War				PROJECT				
II. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Targe Value o Contrac	
a . Various Testing Organizations	OGA, MIPR	ATC, TTC/YPG/DTC/EPG/ ARL-SLAD, etc	0	0		7215	1-4Q	5350	1-4Q	0	12565	(	
Subtotal:			0	0		7215		5350		0	12565	(	
V. Management Services	Contract Method &	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award	FY 2006 Cost	FY 2006 Award	FY 2007 Cost	FY 2007 Award	Cost To Complete	Total Cost	Targe Value o	
a.PM Soldier Warrior - oversight of LW program	Type In-House Task Order	Various	0	0	Date	7219	Date 1-4Q	6744	Date 1-4Q	0	13963	Contrac	
Subtotal:			0	0		7219		6744		0	13963	(	
	verina multinle	quarters reflect multiple	awards.										
Remarks: Award dates co	vering multiple												

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Exhibit R-4 Budget Item Justification

Schedule Detail (R4a Exhibit) February 2005									
BUDGET ACTIVITY 5 - System Development and Demonstration			ER AND TIT I'□ <b>A - Sol</b>		Varrior I	PROJEC rior Dem/Val S5□			
Schedule Detail	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	
DBCS CDR		2Q							
DBCS System Development & Demo		2-4Q							
DBCS Testing		4Q	1Q						
DBCS MS C		4Q							
DBCS Production & Deployment		1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	
DBCS Operational Test			3Q						
DBCS FUE			3Q						
LW Stryker Development		2-4Q							
LW Stryker Initiate Long Leads		4Q	1-3Q						
LW Stryker Limited Testing & Evaluation		4Q	1-3Q						
Stryker BN Equipped			3Q						
GSS MS B			4Q						
GSS System Development & Demo			4Q	1-4Q	1-4Q	1-2Q			
GSS MS C LRIP					4Q				

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